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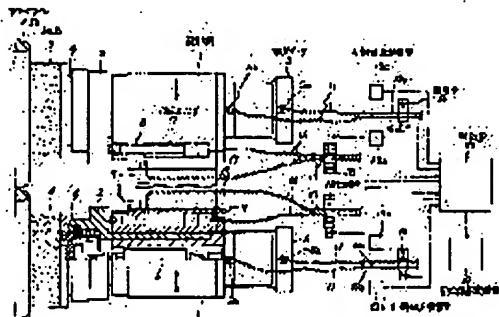
HARUYAMA TETSUHIKO

(54) TROUBLE DIAGNOSING METHOD FOR ON-LINE ROLL GRINDING DEVICE

(57) Abstract:

PURPOSE: To automatically detect the generation of bad grinding without executing the visual observation by an operator by detecting the output torque of a grinding wheel driving/revolving device while grinding a roll with a grinding wheel and executing trouble diagnosis by the upper and lower limits of that torque.

CONSTITUTION: While rolling a steel strip, both grinding wheels 3 are revolved with hydraulic motors 5 through universal joints 6 with splines and grinding wheel holders 4. The grinding wheels 3 are pressed against upper and lower work rolls 41a, 41b through sleeves 2 and the grinding wheel holders 4 with hydraulic cylinders 7 and rods 8 and grinding is executed by oscillating the grinding wheels in the axial direction of roll. During rolling, the inlet pressure and outlet pressure of the hydraulic motors 5 are continuously detected with inlet and outlet oil pressure detectors 13a, 13b and sent to a control panel 20 after transducing into current values. Then, the output torques of the motors 5 are calculated, compared with the upper and lower limit values which are beforehand set as the range of the normal output and, when there is abnormality, the output torque which is calculated as the



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trouble of each equipment is displayed on a monitor and operation is stopped by directing the driving devices, valves, etc.

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